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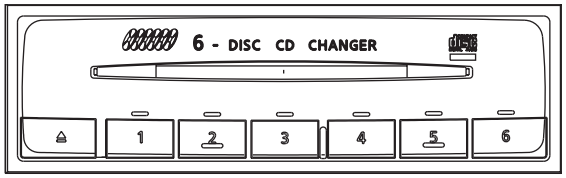
Service Manual



NISSAN Automobile Genuine
6-Disc CD Changer Deck

Model PN-2538D
(Genuine No.28184 9Y800
/ID No.CE05A)

Model PN-2538M
(Genuine No.28184 6Z700
/ID No.CE040)

SPECIFICATIONS

Output level:	3.0V +2/-2dB(at 1kHz)
Frequency Response:	17Hz to 20kHz +2/-2dB
Separation:	More than 70dB (at 1kHz, Filter:20kHz LPF)
Distortion:	Less than 0.02% (at 1kHz, Filter:20kHz LPF)
Power supply voltage:	DC13.2V Negative ground
Current consumption:	0.6A(during playing)
Dimensions(mm):	184(W) x56(H) x197.5(D)
Weight:	1.65kg

COMPONENTS

PN-2538D-A/PN-2538M-A

1	Main unit	----------	1
2	Lock pin	335-6703-00	1

NOTE

* Specifications and design are subject to change without notice for further improvement.
* We cannot supply PWB with component parts in principle.
  When a circuit on PWB has failure, please repair it by component parts base. Parts which are not mentioned in service manual are not supplied.

To engineers in charge of repair or inspection of our products.

Before repair or inspection, make sure to follow the instructions so that customers and Engineers in charge of repair or inspection can avoid suffering any risk or injury.

1. Use specified parts.
   The system uses parts with special safety features against fire and voltage. Use only parts with equivalent characteristics when replacing them.
   The use of unspecified parts shall be regarded as remodeling for which we shall not be liable. The onus of product liability (PL) shall not be our responsibility in cases where an accident or failure is as a result of unspecified parts being used.
2. Place the parts and wiring back in their original positions after replacement or re-wiring.
   For proper circuit construction, use of insulation tubes, bonding, gaps to PWB, etc, is involved. The wiring connection and routing to the PWB are specially planned using clamps to keep away from heated and high voltage parts. Ensure that they are placed back in their original positions after repair or inspection.
   If extended damage is caused due to negligence during repair, the legal responsibility shall be with the repairing company.
3. Check for safety after repair.
   Check that the screws, parts and wires are put back securely in their original position after repair. Ensure for safety reasons there is no possibility of secondary ploblems around the repaired spots.
   If extended damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.
4. Caution in removal and making wiring connection to the parts for the automobile.
   Disconnect the battery terminal after turning the ignition key off. If wrong wiring connections are made with the battery connected, a short circuit and/or fire may occur.
   If extensive damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.

5. Cautions regarding chips.
   Do not reuse removed chips even when no abnormality is observed in their appearance. Always replace them with new ones. (The chip parts include resistors, capacitors, diodes, transistors, etc). The negative pole of tantalum capacitors is highly susceptible to heat, so use special care when replacing them and check the operation afterwards.
6. Cautions in handling flexible PWB
   Before working with a soldering iron, make sure that the iron tip temperature is around 270℃. Take care not to apply the iron tip repeatedly(more than three times)to the same patterns. Also take care not to apply the tip with force.
7. Turn the unit OFF during disassembly and parts replacement. Recheck all work before you apply power to the unit.
8. Cautions in checking that the optical pickup lights up.
   The laser is focused on the disc reflection surface through the lens of the optical pickup. When checking that the laser optical diode lights up, keep your eyes more than 30cms away from the lens. Prolonged viewing of the laser within 30cms may damage your eyesight.
9. Cautions in handling the optical pickup
   The laser diode of the optical pickup can be damaged by electrostatic charge caused by your clothes and body. Make sure to avoid electrostatic charges on your clothes or body, or discharge static electricity before handling the optical pickup.

9-1. Laser diode
   The laser diode terminals are shorted for transportation in order to prevent electrostatic damage. After replacement, open the shorted circuit. When removing the pickup from the mechanism, short the terminals by soldering them to prevent this damage.

9-2. Actuator
   The actuator has a powerful magnetic circuit. If a magnetic material is put close to it. Its characteristics will change. Ensure that no foreign substances enter through the ventilation slots in the cover.

9-3. Cleaning the lens
   Dust on the optical lens affects performance. To clean the lens, apply a small amount of isopropyl alcohol to lens paper and wipe the lens gently.

EXPLANATION OF IC

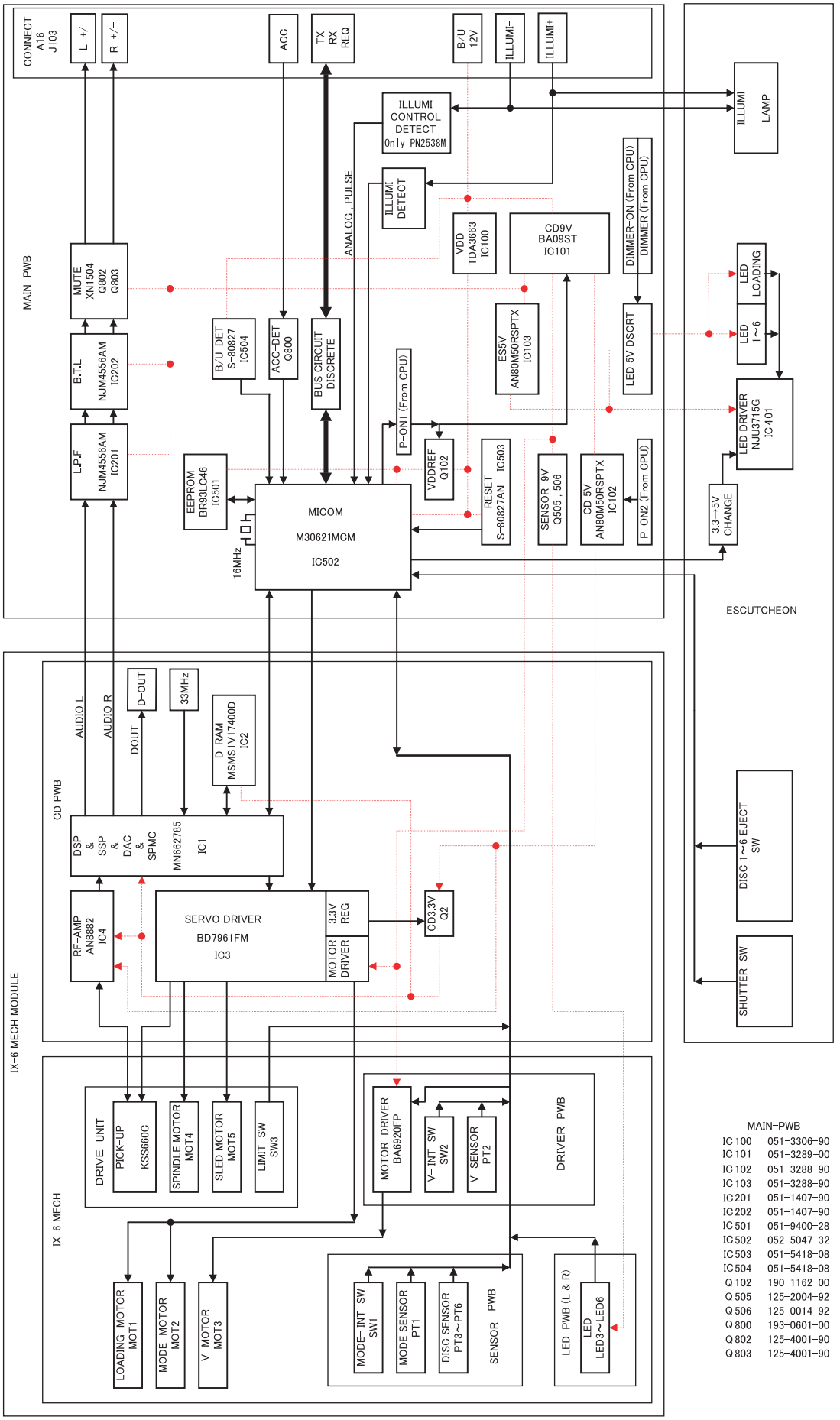
052-5047-32 M30621MCM-1W9GP
6 CD Auto changer Controller

1.Terminal Description

pin 1:	SQCK	: O :	CD DSP SQCK.
pin 2:	DIMMER	: O :	The diminution pulse output to the illumination.
pin 3:	ILL PULSE	: IN :	Illumination control signal input.
pin 4:	TCLK	: O :	The test clock output.
pin 5:	NU	: - :	Not in use.
pin 6:	CONNECT G	: - :	Connect to the ground.
pin 7:	M LD O	: O :	Load command output to CD-IC.
pin 8:	NU	: - :	Not in use.
pin 9:	RESET	: IN :	Reset signal input.
pin 10:	X OUT	: O :	Crystal connection.
pin 11:	GND	: - :	Ground.
pin 12:	X IN	: IN :	Crystal connection.
pin 13:	VDD	: - :	Positive supply voltage.
pin 14:	CONNECT VDD	: - :	Connect to the VDD.
pin 15:	BLKCK	: IN :	The sub code block clock input.
pin 16:	ACC DET	: IN :	ACC detection signal input.
pin 17:	BU DET	: IN :	Backup detection signal input.
pin 18:	SW 9V	: O :	9V power supply control.
pin 19:	BEEP	: O :	Beep out.
pin 20:	REQ O	: O :	Transmit request signal output.
pin 21:	ILL CNT	: O :	The illumination control.
pin 22:	T DATA	: O :	The display data output for the test mode indication.
pin 23:	PON 2	: O :	Power ON signal output.
pin 24:	TX	: O :	Serial data output of N-BUS.
pin 25:	RX	: IN :	Serial data input of N-BUS.
pin 26:	NU	: - :	Not in use.
pin 27:	A MUTE	: O :	The audio mute signal output.
pin 28:	M DATA	: O :	The command data output to the CD IC.
pin 29:	STAT	: IN :	The status data input from the CD IC.
pin 30:	M CLK	: O :	The clock puse output to the CD IC.
pin 31:	LIMIT	: IN :	Sled limit switch signal input.
pin 32:	SW 1	: IN :	The switch signal input.
pin 33:	SW 2	: IN :	The switch signal input.
pin 34:	EPM	: IN :	Pull down.
pin 35:	P ON 1	: O :	Power ON signal output.
pin 36:	PT 2	: IN :	The photo sensor signal input.
pin 37:	PT 5	: IN :	The photo sensor signal input.
pin 38:	PT 4	: IN :	The photo sensor signal input.
pin 39:	PT 3	: IN :	The photo sensor signal input.
pin 40:	PT 6	: IN :	The photo sensor signal input.
pin 41:	PT 1	: IN :	The photo sensor signal input.
pin 42:	M 3 CCW	: O :	The motor drive signal output.
pin 43:	M 3 CW	: O :	The motor drive signal output.
pin 44:	M 2 CCW	: O :	The motor drive signal output.
pin 45:	M 2 CW	: O :	The motor drive signal output.
pin 46:	M 1 CCW	: O :	The motor drive signal output.
pin 47:	M 1 CW	: O :	The motor drive signal output.
pin 48:	RST OUT	: O :	The reset pulse output.
pin 49:	D MUTE	: O :	Digital mute signal output.
pin 50:	HSSW1	: O :	The test terminal.
pin 51:	ILL	: IN :	Illumination ON signal input.
pin 52:	TEST 4	: IN :	For the test.
pin 53:	TEST 3	: IN :	For the test.
pin 54:	TEST 2	: IN :	For the test.
pin 55:	TEST 1	: IN :	For the test.
pin 56:	EEP DI	: IN :	The serial data input from EEP-ROM.
pin 57:	EEP DO	: O :	The serial data output to EEP-ROM.
pin 58:	EEP CLK	: O :	The clock pulse output to EEP-ROM.
pin 59:	EEP CE	: O :	The chip enable pulse output to EEP-ROM.
pin 60:	Destination 1	: IN :	The destination setting signal input.
pin 61:	Destination 2	: IN :	The destination setting signal input.
pin 62:	T CLR	: O :	The clear signal output for the test mode indication.
pin 63:	LED CLK	: O :	The clock pulse output to LED driver.
pin 64:	LED STB	: O :	The strobe pulse output to LED driver.
pin 65:	LED CLR	: O :	The clear pulse output to LED driver.
pin 66:	LED DATA	: O :	The serial data output to LED driver.
pin 67:	ILL ON	: O :	The illumination ON signal output.
pin 68:	K IN 0	: IN :	The key scan intput terminal.
pin 69:	K IN 1	: IN :	The key scan intput terminal.
pin 70:	K IN 2	: IN :	The key scan intput terminal.
pin 71:	K IN 3	: IN :	The key scan intput terminal.
pin 72:	K OUT 0	: O :	The key scan output terminal.
pin 73:	K OUT 1	: O :	The key scan output terminal.
pin 74:	SHUT	: IN :	The shutter signal input.
pin 75:	GND	: - :	Ground.
pin 76:	ILL AD	: IN :	The analog voltage input for illumination signal.
pin 77:	VDD REF	: - :	VDD reference voltage.
pin 78:	VDD	: - :	Positive supply voltage.
pin 79:	SUB Q	: IN :	Sub Q data input from the CD IC.
pin 80:	NU	: - :	Not in use.

BLOCK DIAGRAM

Main/Escutcheon/CD changer module section

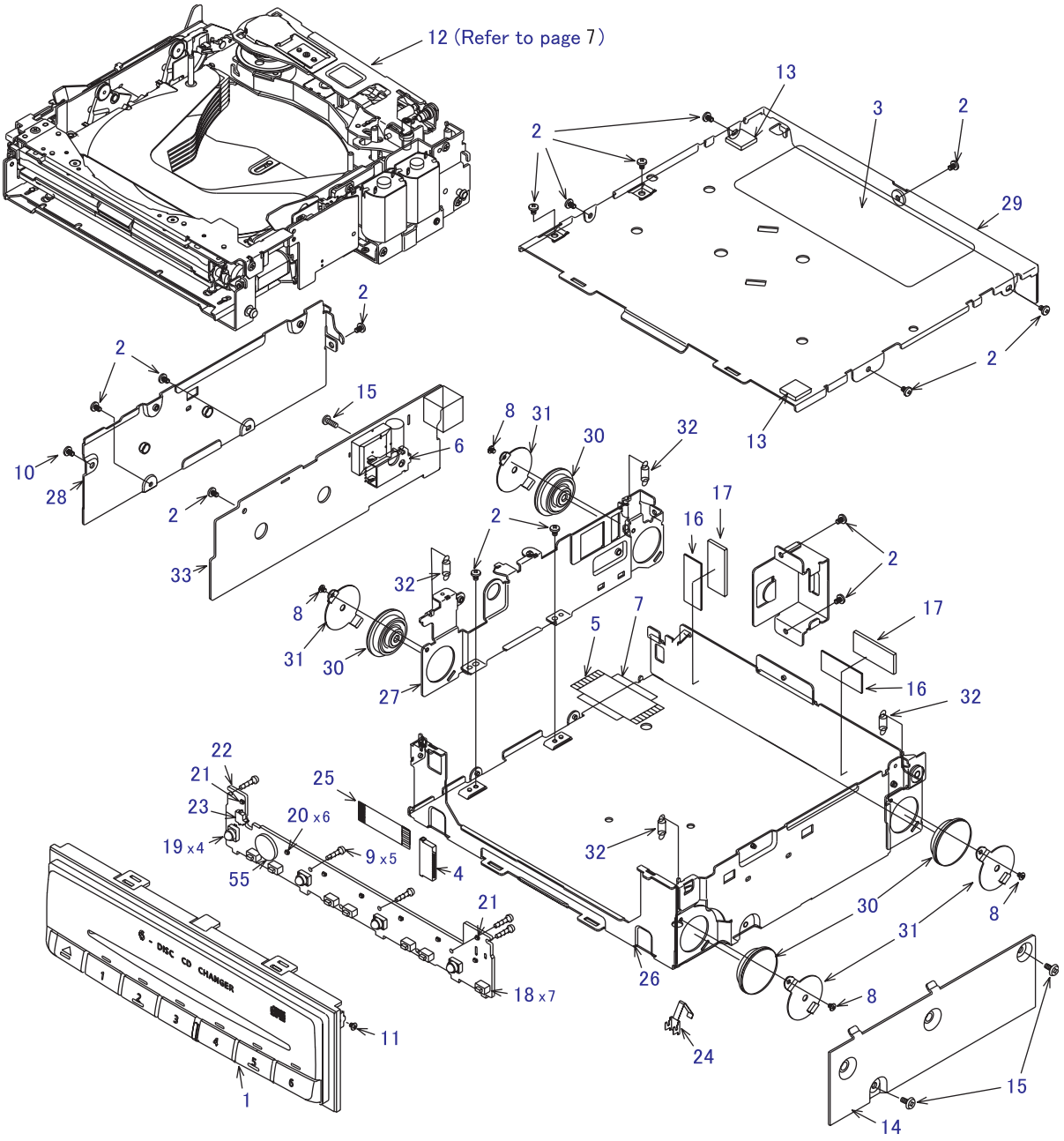


MAIN-PWB

IC 100	051-3306-90
IC 101	051-3289-00
IC 102	051-3288-90
IC 103	051-3288-90
IC 201	051-1407-90
IC 202	051-1407-90
IC 501	051-9400-28
IC 502	052-5047-32
IC 503	051-5418-08
IC 504	051-5418-08
Q 102	190-1162-00
Q 505	125-2004-92
Q 506	125-0014-92
Q 800	193-0601-00
Q 802	125-4001-90
Q 803	125-4001-90

EXPLODED VIEW/PARTS LIST

Main section



Note) Some parts depend on each model.
The model name is specified in the description.
(38D):PN-2538D, (38M):PN-2538M

NO.	PART NO.	DESCRIPTION	Q'TY
1	940-8014-22 940-8014-12	ESCUTCHEON ASSY(38D) ESCUTCHEON ASSY(38M)	1
2	716-1716-00	SCREW M2 x3	15
3	286-9086-29 286-9086-28	SETPLATE(38D) SETPLATE(38M)	1
4	074-1239-76	26P OUTLET SOCKET	1
5	039-1957-01	FPC	1
6	331-3267-00	TR-HOLDER	1
7	347-6619-00	INSULATOR	1
8	716-3450-00	SCREW M1.7 x2	4
9	716-0872-01	PAD SCREW M1.7 x6	5
10	716-3462-00	SCREW M2 x5	1
11	716-3461-00	SCREW M2 x3	1

NO.	PART NO.	DESCRIPTION	Q'TY
12	----------	CD CHANGER MODULE 018200-929	1
13	345-8239-00	CUSHION RUBBER	2
14	331-3497-00	SIDE PLATE	1
15	716-2606-81	MACHINE SCREW M2.6 x6	3
16	331-3592-00	PROTECT PLATE	2
17	345-5237-00	CUSHION RUBBER	2
18	013-6302-50	SWITCH	7
19	017-0433-86	PILOT LAMP 14V40mA	3
20	001-7045-90	DIODE CL-165D/FG	6
21	001-7043-90	DIODE CL-170FG	2
22	039-2230-00	ESCUTCHEON PWB (WITHOUT COMPONENT)	1

NO.	PART NO.	DESCRIPTION	Q'TY
23	013-7415-50	DETECTOR SWITCH	1
24	331-1861-10	EARTH PLATE	1
25	816-2610-00	FLAT WIRE	1
26	311-1836-02	LOWER CASE	1
27	331-3266-15	PWB HOLDER	1
28	305-0315-15	SIDE CASE	1

NO.	PART NO.	DESCRIPTION	Q'TY
29	310-1741-14	UPPER CASE	1
30	629-0083-01	DAMPER	4
31	620-1086-00	DAMPER-H-PLT	4
32	750-3491-00	FL-SPRING	4
33	039-2232-01	MAIN PWB (WITHOUT COMPONENT)	1

ELECTRICAL PARTS LIST

Note)Some parts depend on each model.The model name is specified in the descripion . (38D;PN-2538D, 38M;PN-2538M)

Note) Several different parts of the same reference number are alternative parts. One of those parts is used in the set.

Main PWB section(B1)

REF No.	PART No.	DESCRIPTION
C101	168-1045-56	0.1 uF
C102	046-1032-78	0.01 uF
C104	163-1073-15	6.3V100 uF
C108	189-4773-38	16V470 uF
C109	168-1045-56	0.1 uF
C110	178-4742-78	0.47 uF
C111	042-0560-85	6.3V100uF
C112	163-2273-25	10V 220 uF
C113	168-1045-56	0.1 uF
C114	163-1073-15	6.3V100 uF
C115	168-1045-56	0.1 uF
C116	178-4742-78	0.47 uF
C117	178-4742-78	0.47 uF
C118	178-3342-78	0.33 uF
C119	178-1052-78	1 uF
C120	178-1052-78	1 uF
C201	163-2263-15	6.3V22 uF
C202	163-2263-15	6.3V22 uF
C203	045-1211-50	120pF
C204	045-1211-50	120pF
C205	045-2201-50	22pF
C206	045-2201-50	22pF
C207	168-1045-56	0.1 uF
C209	163-1073-15	6.3V100 uF
C210	168-1045-56	0.1 uF
C211	046-3322-58	3300pF
C212	046-3322-58	3300pF
C213	046-6812-58	680pF
C214	046-6812-58	680pF
C215	046-1022-58	1000pF
C216	046-1022-58	1000pF
C217	163-2273-25	10V 220 uF
C218	163-2273-25	10V 220 uF
C219	163-2273-25	10V 220 uF
C220	163-2273-25	10V 220 uF
C501	163-1063-35	16V10 uF
C502	168-1045-56	0.1 uF
C503	168-4735-56	0.047 uF
C504	168-1045-56	0.1 uF
C505	046-2232-78	0.022 uF
C602	172-1041-11	0.1 uF
C603	046-1022-58	1000pF
C604	046-1022-58	1000pF
C605	046-1022-58	1000pF
C621	163-3353-65	50V3.3 uF
C710	168-1045-56	0.1 uF(38M)
C711	163-1063-35	16V10 uF
C712	163-4753-55	35V4.7 uF(38M)
C713	163-4753-55	35V4.7 uF(38M)
C800	163-1053-65	50V1 uF
C801	045-1011-50	100pF
C802	046-2222-58	2200pF
C803	046-2222-58	2200pF
C804	046-2222-58	2200pF
C805	046-2222-58	2200pF

REF No.	PART No.	DESCRIPTION
D100	001-0627-90	U1BC44
D101	001-0529-34	MA8062-L
D603	001-0516-90	MA111
D604	001-0516-90	MA111
D607	001-4302-38	UDZTE-17 33B
D608	001-4302-38	UDZTE-17 33B
D609	001-0516-90	MA111
D701	001-0529-21	MA8039-H(38M)
D703	001-0516-90	MA111(38M)
D801	001-2015-00	RL253
IC100	051-3306-90	TDA3663AT
IC101	051-3289-00	BA09ST
IC102	051-3288-90	AN80M50RSPTX
IC103	051-3288-90	AN80M50RSPTX
IC201	051-1407-90	NJM4556AM
IC202	051-1407-90	NJM4556AM
IC501	051-9400-28	BR93LC46F-WE2
IC502	052-5047-32	M30621MCM-1W9GP
IC503	051-5418-08	S-80827ANMP-EDQ
IC504	051-5418-08	S-80827ANMP-EDQ
J101	074-1189-95	45P
J102	074-1059-76	26P
J103	074-1087-12	A16 16P
Q100	191-1205-60	2SB1205RST
Q101	125-2004-92	RN1402
Q102	190-1162-00	2SA1162
Q204	125-2004-92	RN1402
Q505	125-2004-92	RN1402
Q506	125-0014-92	DTA114EK
Q603	192-2712-00	2SC2712
Q604	192-2712-00	2SC2712
Q605	125-0014-92	DTA114EK
Q606	192-2712-00	2SC2712
Q607	125-2004-92	RN1402
Q706	125-2004-92	RN1402(38M)
Q707	193-2118-00	2SD2118(38M)
Q708	125-2004-92	RN1402(38M)
Q709	125-2004-92	RN1402(38M)
Q711	192-2712-00	2SC2712
Q712	131-1188-00	2SB1188
Q713	125-2004-92	RN1402
Q800	193-0601-00	2SD601A
Q801	190-1162-00	2SA1162
Q802	125-4001-90	XN1504
Q803	125-4001-90	XN1504
R100	032-0145-54	1/2W 10 ohm
R101	033-4711-15	1/16W 470 ohm
R102	033-2231-15	1/16W 22k ohm
R103	116-1511-15	1/8W 150 ohm
R104	116-1511-15	1/8W 150 ohm
R105	032-0145-54	1/2W 10 ohm
R106	032-0145-54	1/2W 10 ohm
R207	033-6821-15	1/16W 6.8k ohm
R208	033-2731-15	1/16W 27k ohm

REF No.	PART No.	DESCRIPTION
R209	033-1031-15	1/16W 10k ohm
R210	033-1031-15	1/16W 10k ohm
R211	033-6821-15	1/16W 6.8k ohm
R212	033-8221-15	1/16W 8.2k ohm
R213	033-2731-15	1/16W 27k ohm
R214	033-1031-15	1/16W 10k ohm
R215	033-1031-15	1/16W 10k ohm
R216	033-1031-15	1/16W 10k ohm
R218	033-2201-15	1/16W 22 ohm
R219	033-2201-15	1/16W 22 ohm
R220	033-2201-15	1/16W 22 ohm
R221	033-2201-15	1/16W 22 ohm
R223	033-3921-15	1/16W 3.9k ohm
R224	033-3921-15	1/16W 3.9k ohm
R225	033-8221-15	1/16W 8.2k ohm
R226	033-8221-15	1/16W 8.2k ohm
R504	033-2221-15	1/16W 2.2k ohm
R505	033-1031-15	1/16W 10k ohm
R509	033-4731-15	1/16W 47k ohm
R512	050-0145-54	1/16W 47k ohm x4
R513	033-1041-15	1/16W 100k ohm
R514	050-0145-53	1/16W 220k ohm x4
R515	033-1041-15	1/16W 100k ohm
R518	033-1041-15	1/16W 100k ohm
R520	033-2741-15	1/16W 270k ohm
R521	033-4731-15	1/16W 47k ohm
R522	050-0145-54	1/16W 47k ohm x4
R523	033-4741-15	1/16W 470k ohm
R524	033-4731-15	1/16W 47k ohm
R525	033-4731-15	1/16W 47k ohm
R527	050-0145-50	1/16W 270 ohm x4
R528	050-0145-50	1/16W 270 ohm x4
R529	050-0145-50	1/16W 270 ohm x4
R539	033-4721-15	1/16W 4.7k ohm
R540	050-0145-58	1/16W 2.2k ohm x4
R601	033-5621-15	1/16W 5.6k ohm
R606	033-5631-15	1/16W 56k ohm
R609	032-0145-54	1/2W 10 ohm
R610	033-2231-15	1/16W 22k ohm
R611	033-1031-15	1/16W 10k ohm
R612	033-4731-15	1/16W 47k ohm
R613	033-1031-15	1/16W 10k ohm
R614	033-1031-15	1/16W 10k ohm
R615	033-1031-15	1/16W 10k ohm
R616	033-1031-15	1/16W 10k ohm
R617	033-4731-15	1/16W 47k ohm
R620	033-5631-15	1/16W 56k ohm
R621	033-5631-15	1/16W 56k ohm
R740	032-0145-64	1/2W 470 ohm(38M)
R743	033-4721-15	1/16W 4.7k ohm (38M)
R744	033-1041-15	1/16W 100k ohm
R745	033-4721-15	1/16W 4.7k ohm (38M)
R746	033-4731-15	1/16W 47k ohm

REF No.	PART No.	DESCRIPTION
R747	033-2231-15	1/16W 22k ohm (38M)
R748	033-4721-15	1/16W 4.7k ohm (38M)
R749	033-1031-15	1/16W 10k ohm
R751	033-1021-15	1/16W 1k ohm
R800	033-4731-15	1/16W 47k ohm
R801	033-5611-15	1/16W 560 ohm
R802	033-1031-15	1/16W 10k ohm
R803	033-1041-15	1/16W 100k ohm

REF No.	PART No.	DESCRIPTION
R804	033-1031-15	1/16W 10k ohm
R805	033-1031-15	1/16W 10k ohm
R806	033-1021-15	1/16W 1k ohm
R807	033-1021-15	1/16W 1k ohm
R808	033-1031-15	1/16W 10k ohm
R809	033-1031-15	1/16W 10k ohm
R810	033-1031-15	1/16W 10k ohm
R811	033-1031-15	1/16W 10k ohm
R820	116-3031-15	1/8W 30k ohm
R821	116-3031-15	1/8W 30k ohm

REF No.	PART No.	DESCRIPTION
R900	033-0000-05	1/16W 0 ohm(38D)
R901	033-0000-05	1/16W 0 ohm(38D)
R910	033-1041-15	1/16W 100k ohm
R920	033-1041-15	1/16W 100k ohm (38M)
R921	033-0000-05	1/16W 0 ohm(38D)
R923	033-1041-15	1/16W 100k ohm
T101	009-0679-00	CHOCK
X501	060-1505-50	10MHz

Escutcheon PWB section(B2)

REF No.	PART No.	DESCRIPTION
C402	168-1045-56	0.1 uF
CCT2	050-0145-52	1/16W 1k ohm x4
D401	001-7045-90	CL-165D/FG-D
D402	001-7043-90	CL-170FG-CD
D403	001-7043-90	CL-170FG-CD
D404	001-7045-90	CL-165D/FG-D
D405	001-7045-90	CL-165D/FG-D
D406	001-7045-90	CL-165D/FG-D
D407	001-7045-90	CL-165D/FG-D
D408	001-7045-90	CL-165D/FG-D
D411	001-0655-90	1SS294
D412	001-0655-90	1SS294
IC401	051-6617-08	NJU3715G-TE2
J401	074-1239-76	26P
PL401	017-0433-86	14V40mA
PL402	017-0433-86	14V40mA
PL403	017-0433-86	14V40mA
PL404	017-0433-86	14V40mA
Q401	192-2712-00	2SC2712

REF No.	PART No.	DESCRIPTION
Q402	192-2712-00	2SC2712
Q403	192-2712-00	2SC2712
Q404	192-2712-00	2SC2712
Q406	192-2712-00	2SC2712
R401	119-2211-15	1/16W 220 ohm
R402	119-2211-15	1/16W 220 ohm
R404	119-2211-15	1/16W 220 ohm
R406	119-2211-15	1/16W 220 ohm
R407	119-2211-15	1/16W 220 ohm
R408	119-2211-15	1/16W 220 ohm
R409	119-2211-15	1/16W 220 ohm
R410	119-2211-15	1/16W 220 ohm
R411	119-2211-15	1/16W 220 ohm
R412	119-2211-15	1/16W 220 ohm
R413	119-2211-15	1/16W 220 ohm
R414	119-2211-15	1/16W 220 ohm
R415	119-2211-15	1/16W 220 ohm
R416	119-2211-15	1/16W 220 ohm
R419	033-1031-15	1/16W 10k ohm

REF No.	PART No.	DESCRIPTION
R420	033-1031-15	1/16W 10k ohm
R421	033-1031-15	1/16W 10k ohm
R422	033-1031-15	1/16W 10k ohm
R423	033-1031-15	1/16W 10k ohm
R424	033-1031-15	1/16W 10k ohm
R425	033-1031-15	1/16W 10k ohm
R426	033-1031-15	1/16W 10k ohm
R428	119-2211-15	1/16W 220 ohm
R429	119-1021-15	1/16W 1k ohm
R430	119-1021-15	1/16W 1k ohm
S401	013-6302-50	SKQMAL
S402	013-6302-50	SKQMAL
S403	013-6302-50	SKQMAL
S404	013-6302-50	SKQMAL
S405	013-6302-50	SKQMAL
S406	013-6302-50	SKQMAL
S407	013-6302-50	SKQMAL
S408	013-7415-50	SPVG110400
X401	060-0297-00	PKM13EPP-4002

CD PWB section(B3) : CD changer mechanism

REF No.	PART No.	DESCRIPTION
C2	046-1022-58	1000pF
C3	168-1042-78	16V 0.1 uF
C4	042-0636-54	4V220 uF
C5	168-1042-78	16V 0.1 uF
C6	046-1032-78	0.01 uF
C7	168-1042-78	16V 0.1 uF
C8	178-4742-78	0.47 uF
C9	178-2242-78	0.22 uF
C10	168-1042-78	16V 0.1 uF
C11	168-1042-78	16V 0.1 uF
C12	168-1042-78	16V 0.1 uF
C13	046-2232-78	0.022 uF
C14	168-5612-55	560pF
C15	168-1042-78	16V 0.1 uF
C16	046-2212-58	220pF
C17	046-2212-58	220pF
C18	168-1222-55	1200pF
C19	046-3322-58	3300pF
C20	168-3932-78	0.039 uF
C21	168-3932-78	0.039 uF
C22	042-0416-52	10V10 uF TAN
C25	178-1052-78	1 uF
C26	042-0472-91	16V47 uF
C27	178-3342-78	0.33 uF
C29	168-2732-55	16V 0.027 uF
C30	042-0416-58	4V100 uF
C31	042-0636-52	4V47 uF
C32	046-1022-58	1000pF
C33	046-3322-58	3300pF
C34	168-2732-55	16V 0.027 uF
C35	178-2742-78	0.27 uF
C36	178-1052-78	1 uF
C37	168-1042-78	16V 0.1 uF
C38	042-0472-91	16V47 uF
C39	042-0636-50	6.3V100 uF

REF No.	PART No.	DESCRIPTION
C40	045-1211-50	120pF
C41	045-5601-50	56pF
C42	168-1042-78	16V 0.1 uF
C43	042-0636-52	4V47 uF
C50	168-1042-78	16V 0.1 uF
C51	168-1042-78	16V 0.1 uF
C60	168-5612-55	560pF
D1	001-0367-91	1SS226
IC1	051-6365-00	MN662785TBUC
IC2	051-9318-00	MSM51V17400D-60TS-K
IC2	051-9318-51	K4E160412C-FC60
IC3	051-6060-08	BD7961FM-E2
IC4	051-5711-90	AN8882SB-E1
J1	074-1189-95	45P
J4	074-1138-56	6P
J5	074-1201-65	15P
J6	074-1059-76	26P
L2	010-3050-93	10 uH
L2	010-2155-93	10 uH
Q2	131-1188-00	2SB1188
Q3	131-1188-00	2SB1188
R2	033-1041-15	1/16W 100k ohm
R4	033-3311-15	1/16W 330 ohm
R5	033-1041-15	1/16W 100k ohm
R6	033-3931-15	1/16W 39k ohm
R7	033-1041-15	1/16W 100k ohm
R8	033-5611-15	1/16W 560 ohm
R9	033-5611-15	1/16W 560 ohm
R10	033-1011-15	1/16W 100 ohm
R11	033-3911-15	1/16W 390 ohm
R12	033-2221-15	1/16W 2.2k ohm
R13	033-6831-15	1/16W 68k ohm
R14	033-5621-15	1/16W 5.6k ohm
R15	033-1021-15	1/16W 1k ohm

REF No.	PART No.	DESCRIPTION
R16	033-5631-15	1/16W 56k ohm
R17	033-1031-15	1/16W 10k ohm
R18	033-1031-15	1/16W 10k ohm
R19	033-5621-15	1/16W 5.6k ohm
R20	033-6831-15	1/16W 68k ohm
R21	033-5621-15	1/16W 5.6k ohm
R22	033-1031-15	1/16W 10k ohm
R23	033-1031-15	1/16W 10k ohm
R24	033-4731-15	1/16W 47k ohm
R25	033-3931-15	1/16W 39k ohm
R26	033-6831-15	1/16W 68k ohm
R27	033-6831-15	1/16W 68k ohm
R28	033-1031-15	1/16W 10k ohm
R29	033-2201-15	1/16W 22 ohm
R31	033-8211-15	1/16W 820 ohm
R32	033-5631-15	1/16W 56k ohm
R33	033-6831-15	1/16W 68k ohm
R34	033-3331-15	1/16W 33k ohm
R35	033-6831-15	1/16W 68k ohm
R38	033-3931-15	1/16W 39k ohm
R39	033-1831-15	1/16W 18k ohm
R40	117-1001-15	1/10W 10 ohm
R41	033-6821-15	1/16W 6.8k ohm
R42	033-6821-15	1/16W 6.8k ohm
R43	033-1241-15	1/16W 120k ohm
R44	033-6831-15	1/16W 68k ohm
R45	116-4711-15	1/8W 470 ohm
R46	117-1811-15	1/10W 180 ohm
R47	116-4711-15	1/8W 470 ohm
R48	033-1031-15	1/16W 10k ohm
R49	033-1011-15	1/16W 100 ohm
R60	033-1031-15	1/16W 10k ohm
TM1	073-0768-90	TERMIMAL
X1	060-1527-90	33.8688MHz

Sensor PWB section(B4) : CD changer mechanism

REF No.	PART No.	DESCRIPTION
PT3	060-0252-01	PT4850F
PT4	060-0252-01	PT4850F

REF No.	PART No.	DESCRIPTION
PT5	060-0252-01	PT4850F
PT6	060-0252-01	PT4850F

REF No.	PART No.	DESCRIPTION
S1	013-7414-50	SPVG22

PIM-FPC section(B5) : CD changer mechanism

REF No.	PART No.	DESCRIPTION
IC5	051-5806-02	GPIS95

Driver PWB section(B6) : CD changer mechanism

REF No.	PART No.	DESCRIPTION
C1	168-1045-56	0.1 uF
C2	163-1073-35	16V100 uF
D1	001-0529-29	MA8051-M
IC1	051-6044-18	BA6920FP-Y

REF No.	PART No.	DESCRIPTION
J1	074-1239-76	26P
J2	074-1100-59	9P
R1	033-1021-15	1/16W 1k ohm
R2	032-0104-59	1/4W 2.2 ohm

REF No.	PART No.	DESCRIPTION
R3	032-0104-59	1/4W 2.2 ohm
S1	013-7412-50	SPVG21

PIV-FPC section(B7) : CD changer mechanism

REF No.	PART No.	DESCRIPTION
IC6	051-5806-01	GPIS93

LED-L-PWB section(B8) : CD changer mechanism

REF No.	PART No.	DESCRIPTION
LED3	001-7042-00	GL4800

REF No.	PART No.	DESCRIPTION
LED4	001-7042-00	GL4800

REF No.	PART No.	DESCRIPTION

LED-R-PWB section(B9) : CD changer mechanism

REF No.	PART No.	DESCRIPTION
LED5	001-7042-00	GL4800

REF No.	PART No.	DESCRIPTION
LED6	001-7042-00	GL4800

REF No.	PART No.	DESCRIPTION

L-Motor-FPC section(B10) : CD changer mechanism

REF No.	PART No.	DESCRIPTION
M1	SMA-186-100	LOADING

M/S-FPC section(B11) : CD changer mechanism

REF No.	PART No.	DESCRIPTION
M2	SMA-185-100	SPINDLE

REF No.	PART No.	DESCRIPTION
M3	SMA-184-100	SLED

REF No.	PART No.	DESCRIPTION
S2	013-7414-50	SPVG22

EXPLODED VIEW/PARTS LIST

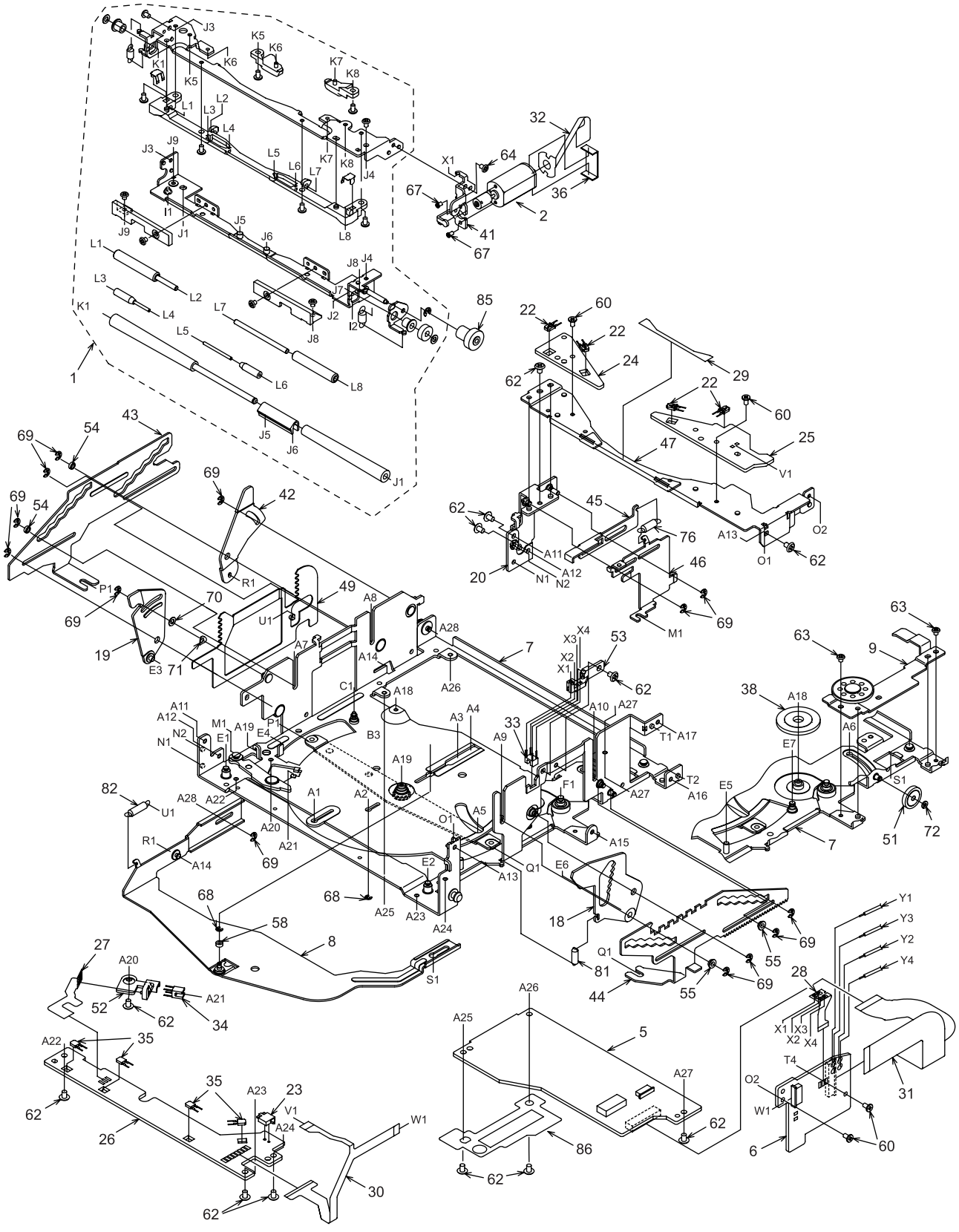
CD changer mechanism section : Main chassis

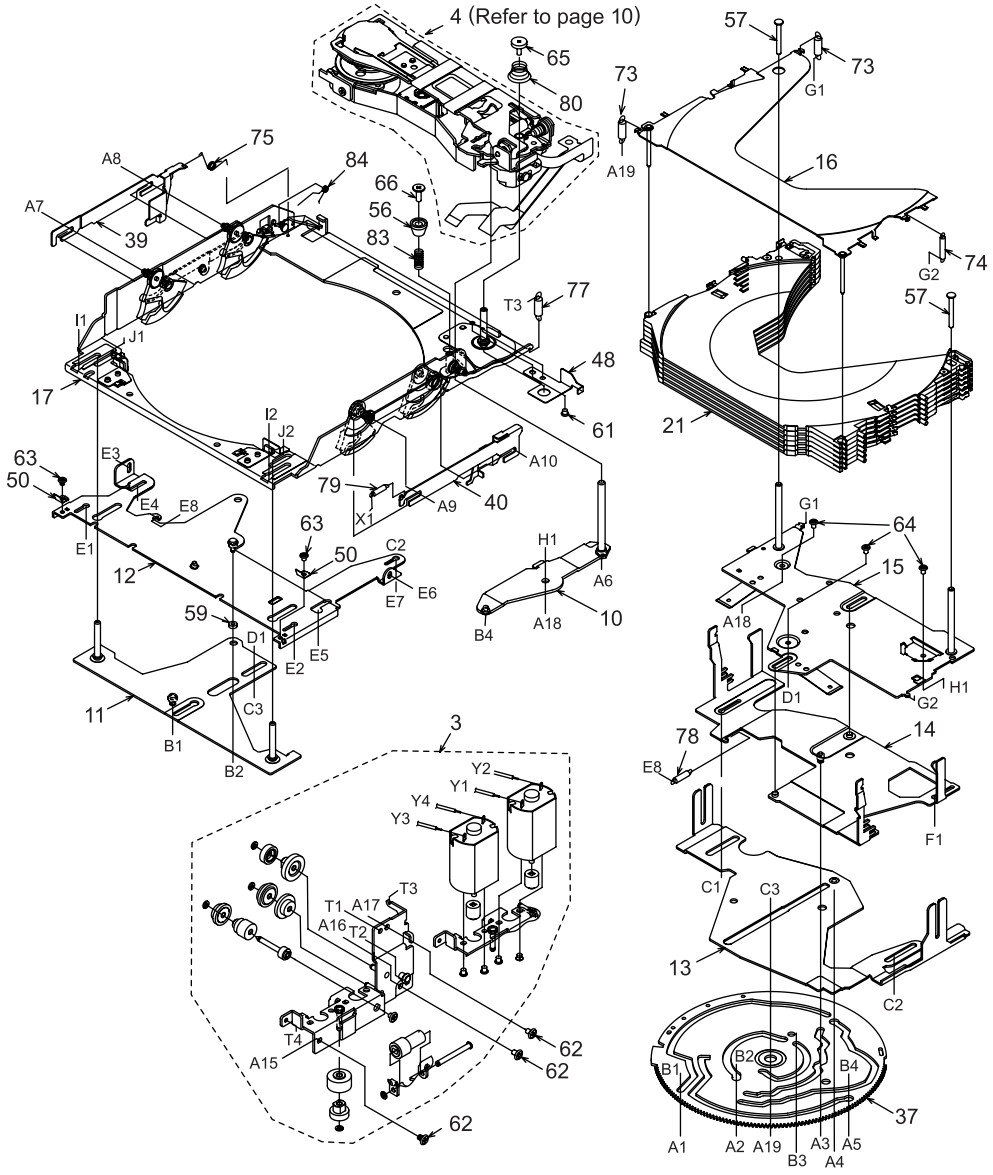
NO.	PART NO.	DESCRIPTION	Q'TY
1	HBS-521-100	LOADING UNIT (WITHOUT MOTOR)	1
2	SMA-186-100	LOADING MOTOR ASSY	1
3	HBS-512-100	MOTOR PLATE SUB ASSY	1
4	HBS-513-103	DRIVE UNIT	1
5	039-2233-00	CD PWB (WITHOUT COMPONENT)	1
6	039-2242-00	DRIVER PWB (WITHOUT COMPONENT)	1
7	966-0597-23	CHASSIS ASSY	1
8	966-0600-21	LOCK-P-RE-ASSY	1
9	966-0601-21	M-GEAR-P-ASSY	1
10	966-0602-23	DR-LINK-ASSY	1
11	966-0603-20	MODE-P-ASSY	1
12	966-0604-22	LOCK-PF-ASSY	1
13	966-0605-20	SHIFT-P-ASSY	1
14	966-0606-23	HLC-PLATE-ASSY	1
15	966-0607-24	COV-OLATE-ASSY	1
16	966-0610-06	TOP-PLATE-ASSY	1

NO.	PART NO.	DESCRIPTION	Q'TY
17	966-0611-05	DR-BASE-P-ASSY	1
18	966-0615-21	LOCK-L-RF-ASSY	1
19	966-0616-20	LOCK-L-LF-ASSY	1
20	966-0618-21	EJECT-B-ASSY	1
21	966-0624-25	DISC-HOL-ASSY	1
22	001-7042-00	DIODE (GL4800)	4
23	013-7414-50	DETECTOR SWITCH	1
24	039-1954-00	LED-L-PWB (WITHOUT COMPONENT)	1
25	039-1955-00	LED-R-PWB (WITHOUT COMPONENT)	1
26	039-1956-00	SENSOR PWB (WITHOUT COMPONENT)	1
27	039-2009-00	PIM FPC	1
28	039-2010-00	RIV-FOC	1
29	039-2011-00	LED-FPC	1
30	039-2012-00	SENSOR-FPC	1
31	039-2013-01	MOS-FPC	1
32	039-2014-00	L-MOTOR-FPC (WITHOUT COMPONENT)	1

NO.	PART NO.	DESCRIPTION	Q'TY
33	051-5806-01	IC (GPIS93)	1
34	051-5806-02	IC (GPIS95)	1
35	060-0252-01	PHOTO-TR	4
36	347-6657-01	LO-COVER SHEET	1
37	620-1041-23	GEAR PLATE	1
38	620-1042-20	M-GEAR-H	1
39	620-1056-01	HLR-PLATE-L	1
40	620-1580-00	HLR-PLATE-R	1

NO.	PART NO.	DESCRIPTION	Q'TY
41	620-1576-20	LO-MOTOR-PLT	1
42	620-1066-20	LOCK LINK-LR	1
43	620-1067-01	SLIDE PLATE-L	1
44	620-1068-22	SLIDE PLATE-R	1
45	620-1071-21	EJECT ARM	1
46	620-1072-20	EJECT PLATE	1
47	620-1577-00	FRONT PLATE	1
48	620-1083-20	FPC-PLATE	1

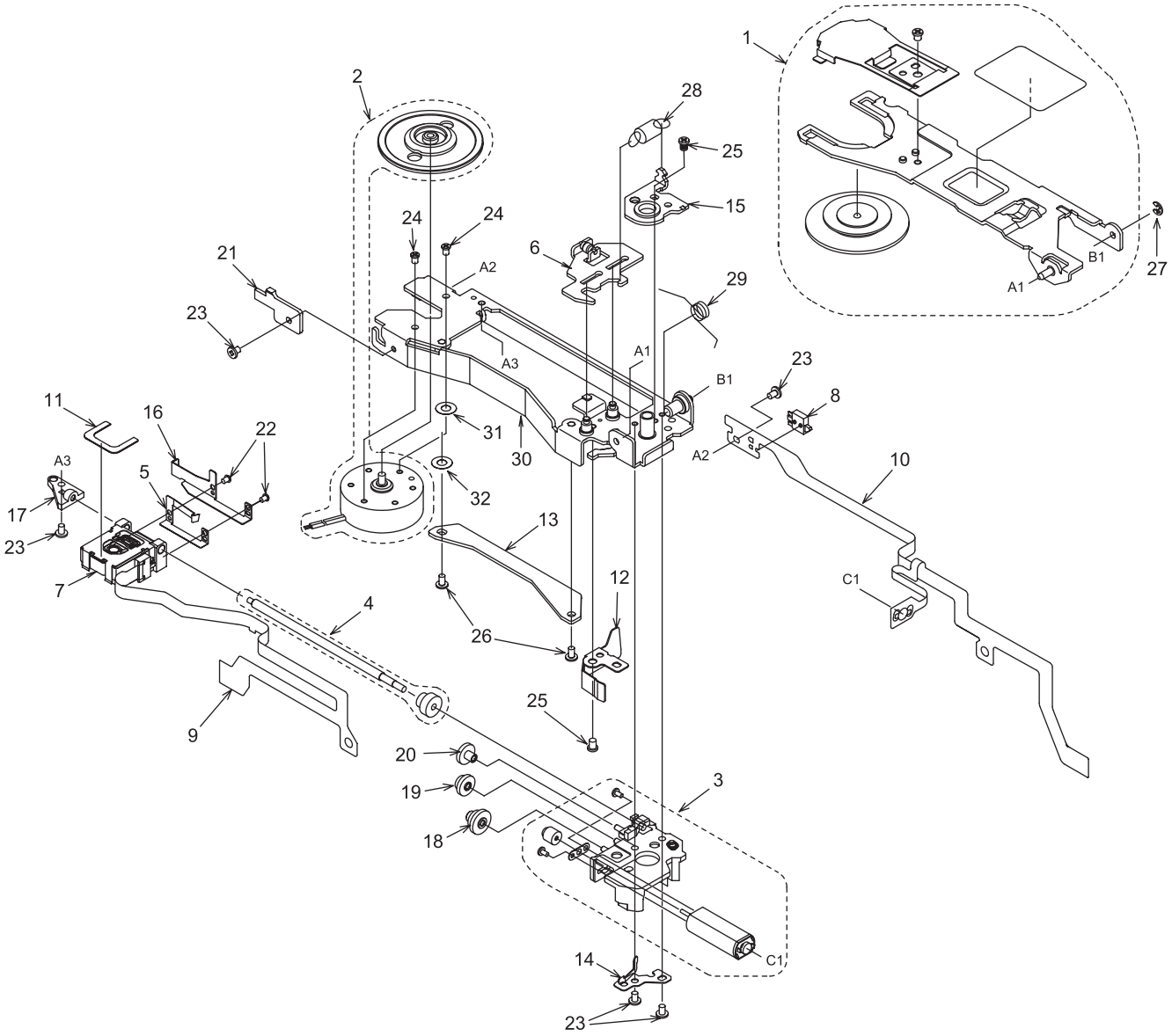




NO.	PART NO.	DESCRIPTION	Q'TY
49	620-1090-20	GAP PLATE	1
50	620-1568-20	RATTLE PLATE-F	2
51	621-0640-20	V-GEAR-G	1
52	621-0641-21	PI-HOLDER-M	1
53	621-0656-21	PI-HOLDER-V	1
54	622-1622-00	SL-G-ROLLER	2
55	622-1623-00	SL-G-ROLLER-R	2
56	622-1648-02	DU-STP-SLEEVE	1
57	622-1650-02	COV-PLATE PIN-B	2
58	622-1651-00	LOCK-RE-ROLLER	1
59	622-1652-00	LOCK-PF-ROLLER	1
60	716-1866-00	SCREW(M1.7 x3)	4
61	716-1873-00	SCREW(M2 x1.6)	1
62	716-3449-00	SCREW(M2 x3)	15
63	716-3450-00	SCREW(M1.7 x2)	4
64	716-3451-00	SCREW(M1.7 x2.5)	3
65	716-3459-00	SCREW(M1.7 x5)	1
66	716-3466-02	SCREW	1
67	738-1422-11	PRECISION SCREW	2

NO.	PART NO.	DESCRIPTION	Q'TY
68	743-1200-20	E-RING	2
69	743-1500-20	E-RING	13
70	746-0624-00	WASHER	1
71	746-0712-03	WASHER	1
72	746-0761-00	WASHER	1
73	750-3478-01	TOP-P-SP-L	2
74	750-3479-01	TOP-P-SP-R	1
75	750-3480-01	DR-LOCK-SP	1
76	750-3483-00	EJECT-A-SPRING	1
77	750-3484-01	DR-BASE-SPRING	1
78	750-3485-01	TENSION-SP-L	1
79	750-3486-01	LO-TENSION-SP	1
80	750-3489-01	DRIVE-P-SPRING	1
81	750-3496-00	GAP-P-SPRING R	1
82	750-3497-00	GAP-P-SPRING L	1
83	750-6711-01	DU-STP-SPRING	1
84	750-6712-01	DR-LOCK-SP-B	1
85	621-0651-22	LOAD GEAR-A	1
86	347-6974-00	FPC COVER	1

CD changer mechanism section : Drive unit

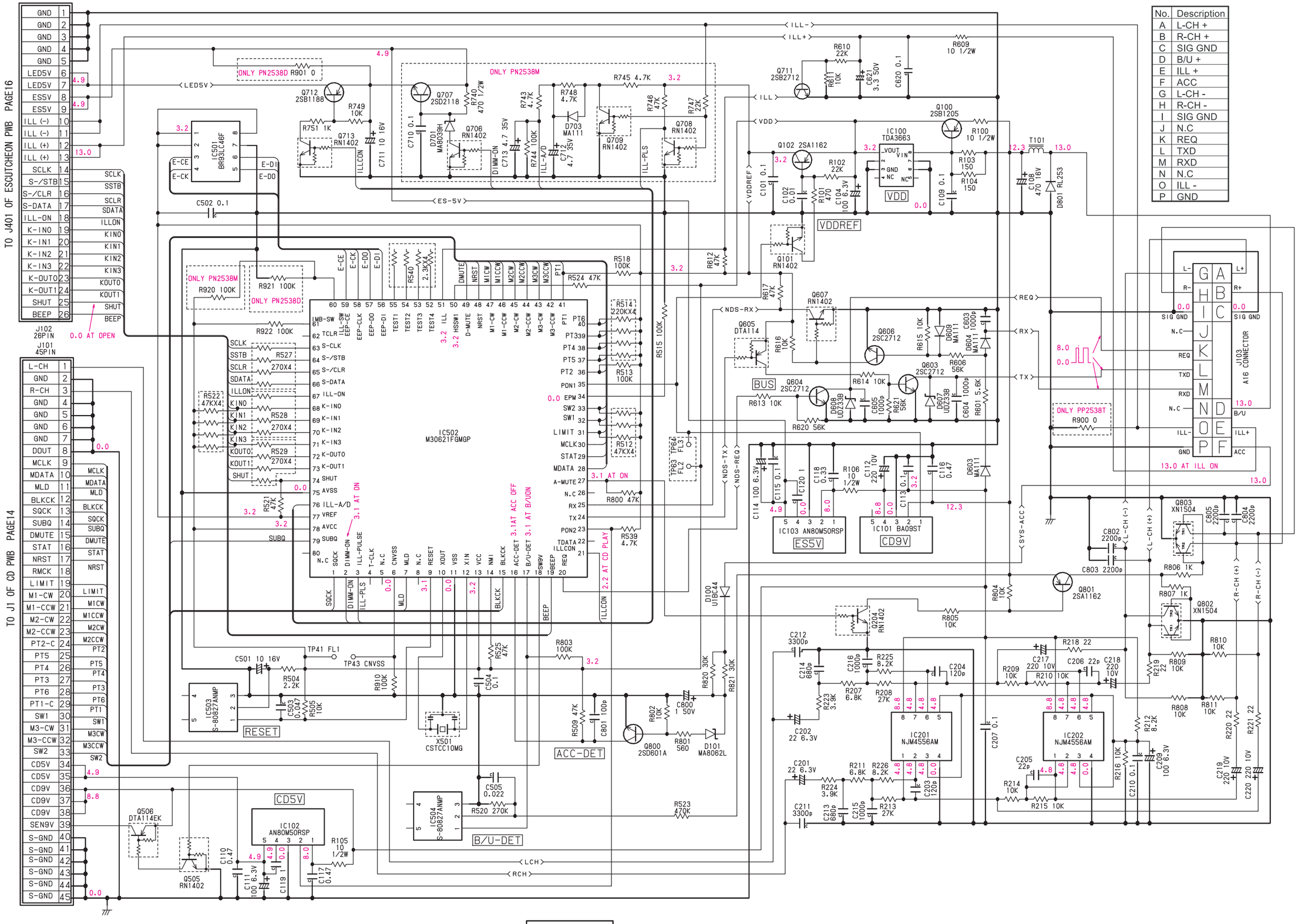


NO.	PART NO.	DESCRIPTION	Q'TY
1	HBS-514-100	CLAMPER SUB ASSY	1
2	SMA-185-100	SPINDLE MOTOR ASSY	1
3	SMA-184-100	SLED MOTOR ASSY	1
4	HBS-515-101	LS-ASSY	1
5	620-1587-00	SH-SP-PLT	1
6	966-0622-02	D-SHIFT-P-ASSY	1
7	969-0009-00	PICK UP-ASSY	1
8	013-7414-50	DETECT SWITCH	1
9	039-2015-01	P/U-FPC	1
10	039-2016-01	M/S-FPC	1
11	347-6632-00	PU-SHEET	1
12	620-1078-20	PUSH PLATE	1
13	620-1080-21	PU-GUIDE PLATE	1
14	620-1081-20	SCREW PUSH-PLT	1
15	620-1082-22	SPRING PLATE	1
16	620-1588-20	SCREW-HOL-PLT	1

NO.	PART NO.	DESCRIPTION	Q'TY
17	621-0670-20	LS-HOLDER-L	1
18	621-0673-20	D-GEAR A	1
19	621-0674-20	D-GEAR B	1
20	621-0675-20	D-GEAR C	1
21	621-0683-21	DU-STOPPER	1
22	716-3460-00	SCREW(M1.4 x 1.8)	2
23	716-3470-00	SCREW(M1.7 x 3)	5
24	738-1722-17	PRECISION SCREW	2
25	738-2025-17	PRECISION SCREW	2
26	716-3474-00	SCREW(M1.7 x 3)	2
27	743-1500-20	E-RING	1
28	750-3487-00	SHIFT-P-SPRING	1
29	750-3504-00	CLAMP-A-SPRING	1
30	966-0619-24	DRIVE PLT-ASSY	1
31	745-0807-00	WASHER	1
32	745-0808-00	WASHER	1

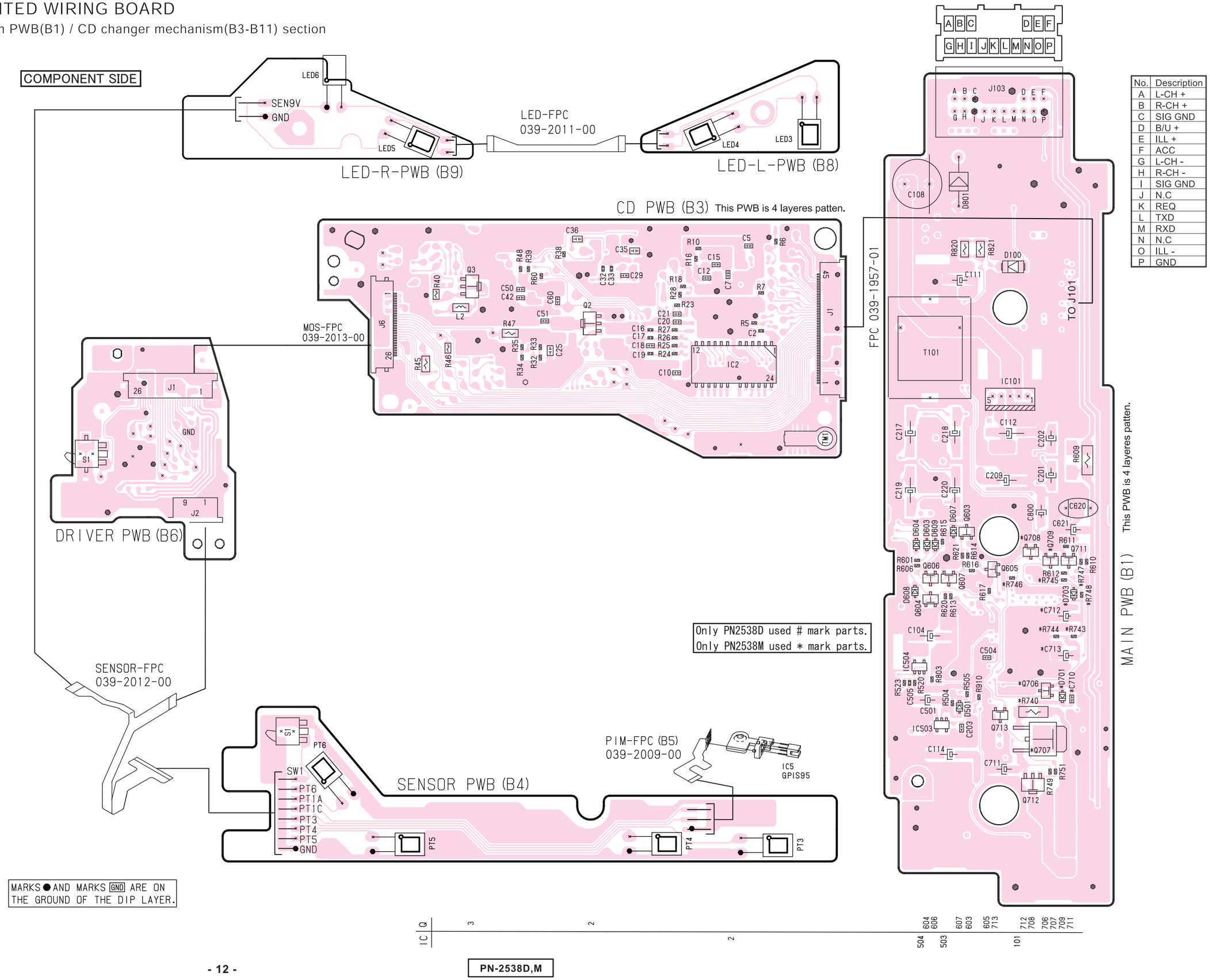
CIRCUIT DIAGRAM

MAIN PWB(B1) section



PRINTED WIRING BOARD

Main PWB(B1) / CD changer mechanism(B3-B11) section



No.	Description
A	L-CH +
B	R-CH +
C	SIG GND
D	B/U +
E	ILL +
F	ACC
G	L-CH -
H	R-CH -
I	SIG GND
J	N.C
K	REQ
L	TXD
M	RXD
N	N.C
O	ILL -
P	GND

PRINTED WIRING BOARD

Main PWB(B1) / CD changer mechanism(B3-B11) section

No.	Description
A	L-CH +
B	R-CH +
C	SIG GND
D	B/U +
E	ILL +
F	ACC
G	L-CH -
H	R-CH -
I	SIG GND
J	N.C
K	REQ
L	TXD
M	RXD
N	N.C
O	ILL -
P	GND

SOLDER SIDE

Caution:
COMPONENT SIDE:
Parts on the component side seen from the component side are indicated.
SOLDER SIDE:
Parts on the solder side seen from the solder side are indicated.

CD PWB (B3) This PWB is 4 layeres patten.

FPC 039-1957-01

MAIN PWB (B1) This PWB is 4 layeres patten.

TO J401 OF ESCUTCHEON PWB (PAGE 16)

FPC 039-2002-00

Only PN2538D used # mark parts.
Only PN2538M used * mark parts.

DRIVE UNIT

P/U-FPC 039-2015-01

PICK UP ASSY 969-0009-00

M2 SPINDLE MOTOR ASSY SMA-185-100

S2 DETECT SWITCH

M3 SLED MOTOR ASSY SMA-184-100

M/S-FPC (B11) 039-2016-01

MOTOR PLATE SUB ASSY HBS-512-100

PIV-FPC (B7) 039-2010-00

IC6 GPIS93

DRIVER PWB (B6)

J2
1. SEN9V
2. GND
3. PT5
4. PT4
5. PT3
6. PT1C
7. PT1A
8. PT6
9. SW1

TO SENSOR-FPC

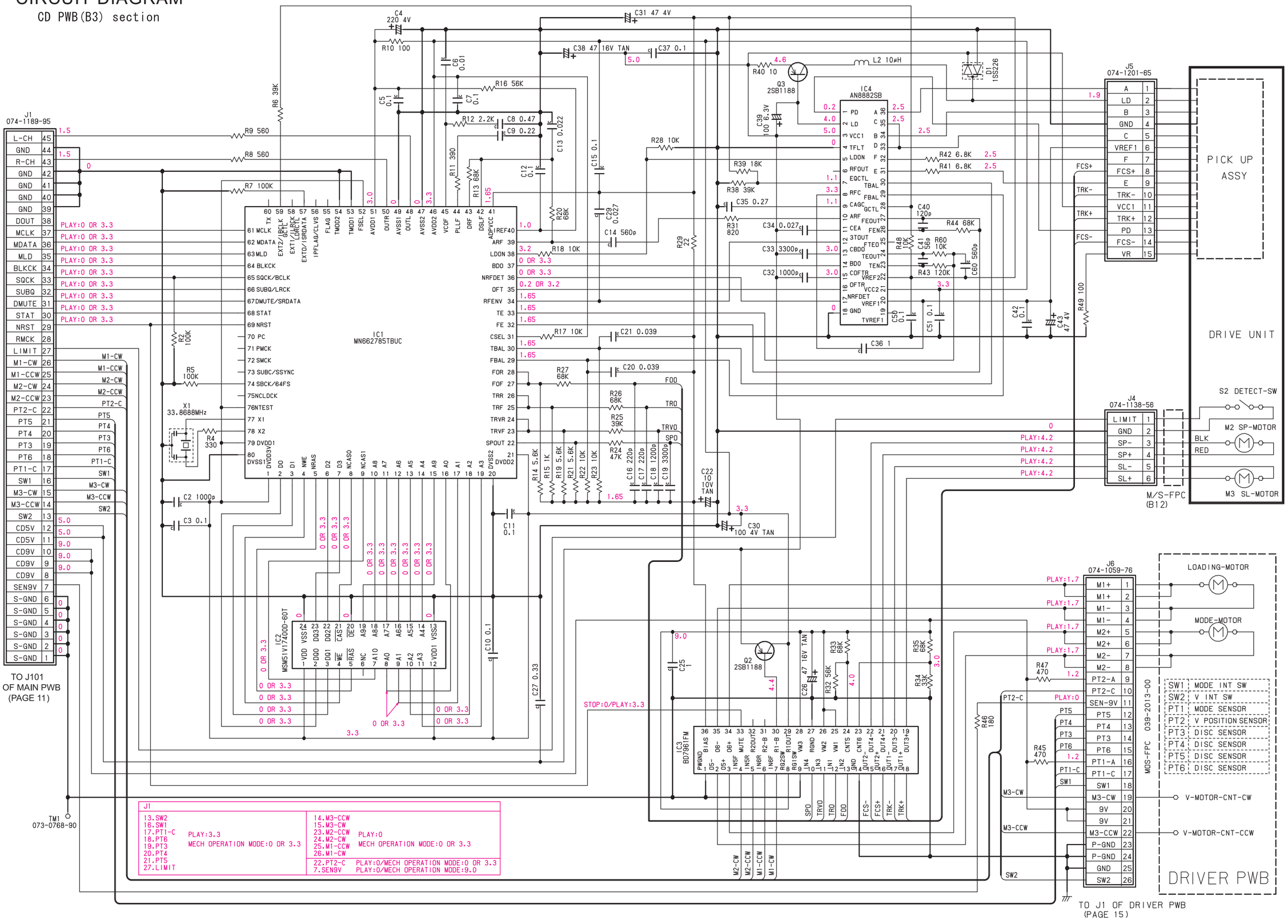
L-MOTOR-FPC 039-2014-00 (B10)

M1 LOADING MOTOR ASSY SMA-186-100

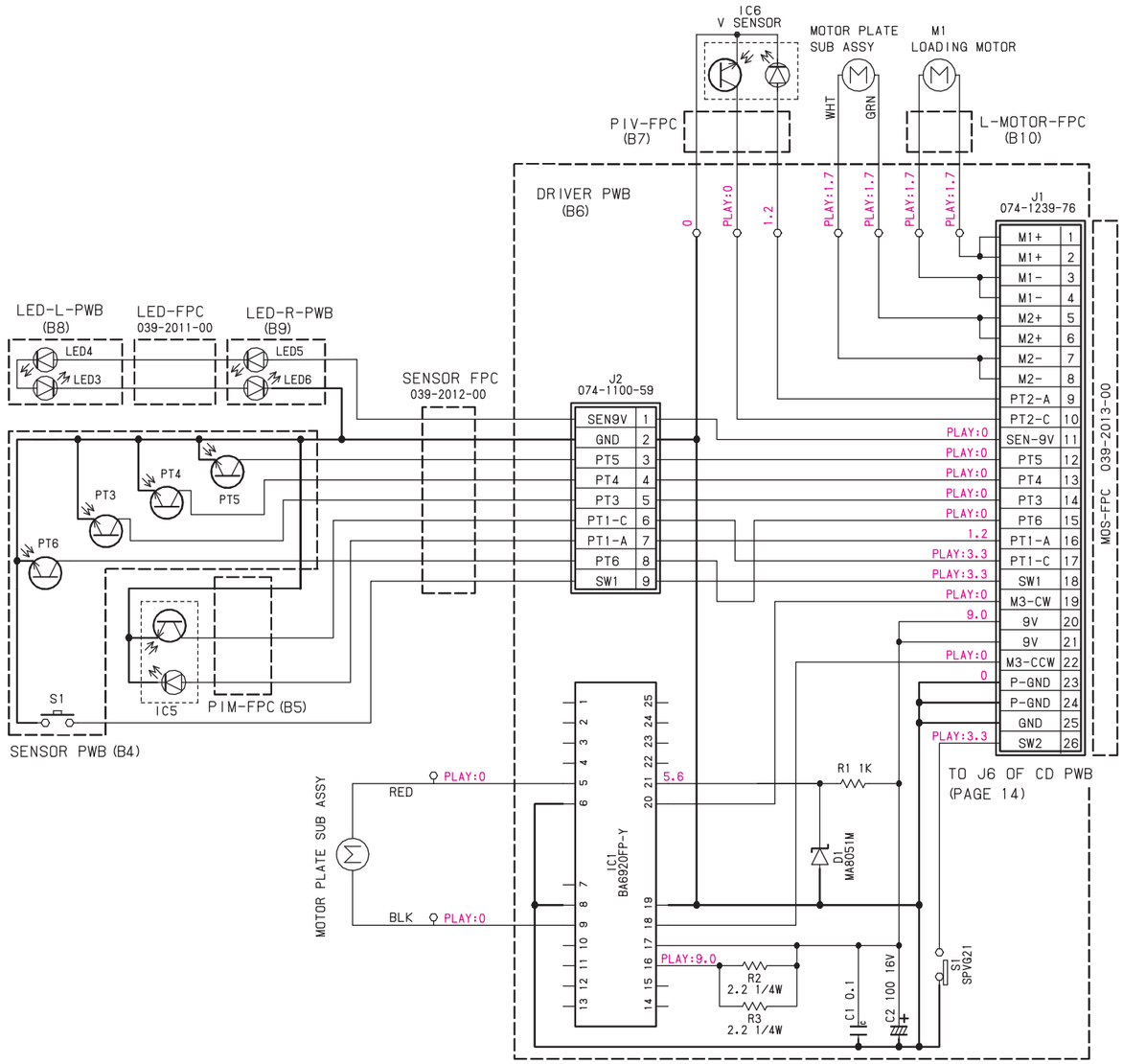
MARKS ● AND MARKS GND ARE ON THE GROUND OF THE DIP LAYER.

CIRCUIT DIAGRAM

CD PWB(B3) section

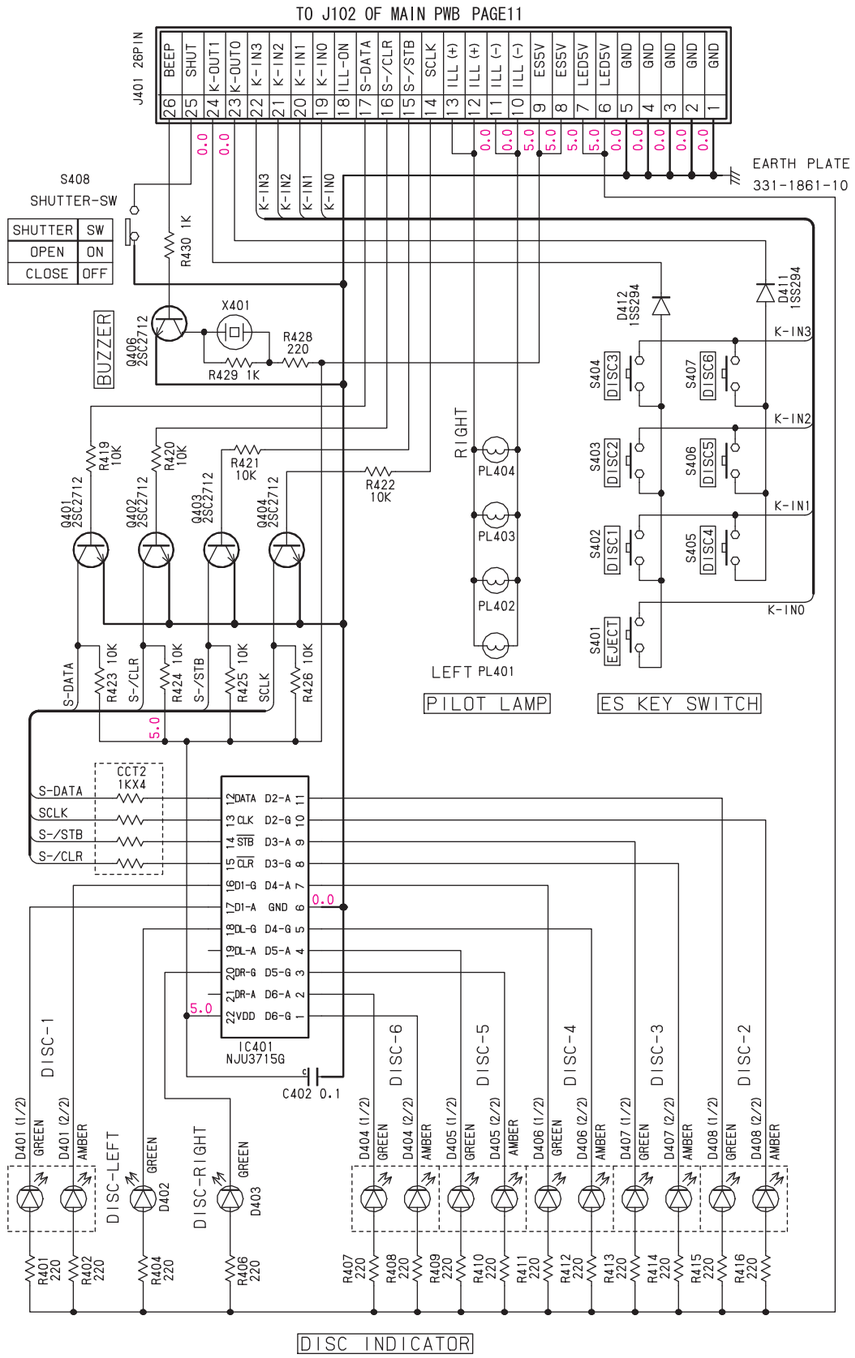


Sensor PWB(B4) / PIM-FPC(B5) / Driver PWB(B6) / PIV-FPC(B7)
/ LED-L-PWB(B8) / LED-R-PWB(B9) / L-Motor-FPC(B10) section : CD changer mechanism



CIRCUIT DIAGRAM

Escutcheon PWB(B2) section



PRINTED WIRING BOARD

Escutcheon PWB(B2) section